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| 10/596,193 | 06/02/2006 | Noriyuki Tajima | P30030 | 3321 |
| 52123 7590 05/02/2008 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191 | | | | |
| EXAMINER LEUNG, PHILIP H | | | | |
| ART UNIT 3742 | | PAPER NUMBER | | |
| NOTIFICATION DATE 05/02/2008 | | DELIVERY MODE ELECTRONIC | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
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Office Action Summary

Application No.

10/596,193

Applicant(s)

TAJIMA ET AL.

Examiner

PHILIP H. LEUNG

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 16-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly presented claim 16 includes new matter not disclosed in the original specification. More particularly, the limitation “a detection section and is made of a magnetic member” at lines 6-7 and the limitation “the detection section is disposed at a position drifted to an inner side of a magnetic path of the magnetic field” at lines 8-9 are new matter. The examiner fails to find a clear support for the “detection section being made of a magnetic member and being positioned drifted to an inner side of a magnetic path of the magnetic field” in the original disclosure. Applicant’s general statement that “new claims 16-18 and 23-26 find support in the disclosure of Embodiment 1 as described in the specification of the present application” is insufficient. It is required to specifically point out in which part of the original specification the new claimed limitations can be found. Clarification and/or removal of the new matter are required.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention. Without a clear description in the specification, the limitation “a detection section and is made of a magnetic member” at lines 6-7 and the limitation “the detection section is disposed at a position drifted to an inner side of a magnetic path of the magnetic field” at lines 8-9 are not understood. What type of material is the detection section (assumably, the temperature sensor, thermistor 260 or the thermostat 301)? The clause “drifted to an inner side” is not structurally understood. How is it and can it be drifted? What caused the position to “drift”? Furthermore, the limitation “wherein the detection section is disposed at a position drifted to an inner side of a magnetic path of the magnetic field” is an intended function and/or result as the claim includes no structure for performing the same. Clarification and correction are required.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16, 21, 22 and 24-28, as far as the claims are understood and proper, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ricoh (JP 2003-017221) (previously cited by the applicant), in view of Ito (JP 57-133468) (newly cited).

Ricoh shows a heating apparatus and image forming apparatus comprising an exciting coil 3b made up of a plurality of windings of a conductor wire for generating a magnetic field; a heating element (1c of roller 1) that is heated by means of electromagnetic induction through an action of the magnetic field; and an abnormally high temperature detection section S2 that

detects that said heating element reaches an abnormally high temperature, wherein: said heating element is made up of a body (roller 1) of rotation which moves with respect to said exciting coil; said exciting coil is wound along the axial direction of the body of rotation and disposed so as to face the outer surface of the body of rotation (see Figures 1-10 and the English abstract). Therefore, Ricoh shows an induction image fixing apparatus having every feature and structure as claimed except that it does not disclose that the temperature detection section is "made of a magnetic member" as now claimed. Ito shows an image fixing device including a heating roller 4 and a temperature detection section 11 with a ferrite material 1a for detecting the temperature of the heating roller (see Figures 1-4 and the English abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ricoh to use a temperature section made of a magnetic member to stabilize and control the heat response of the heating roller for better image fixing performance and result, in view of the teaching of Ito.

Furthermore, the limitation "wherein the detection section is disposed at a position drifted to an inner side of a magnetic path of the magnetic field" is an intended function and/or result as the claim includes no structure for performing the same and would be inherent in the combined Ricoh and Ito structure having same structure as claimed. The exact arrangement would have been a matter of engineering expediciencies depending on the overall structure of the heating roller and the induction coil.

5. Claims 17-20 and 23, as far as the claims are understood and proper, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ricoh (JP 2003-017221), in view of Ito (JP 57-133468), as applied to claims 16, 21, 22 and 24-28, above and further in view of Matsushita (JP 2001-188430) or Canon (JP 8-16006) (both previously cited by the applicant).

As pointed out above, Ricoh combined with Ito shows an induction image fixing apparatus having every feature and structure as claimed except for the explicit showing of the core structure for the induction heating coil. Matsushita discloses a heating device equipped with a center core, which is configured from a ferromagnetic member that is disposed at the center of the windings of the excitation coil, and side cores, which are configured from ferromagnetic members that are disposed on the outsides of the winding bundles of the excitation coil (see Figures and the English abstract). Canon also shows a heating device wherein the means for detecting abnormal temperatures is sandwiched between the core and the excitation coil by means of the side parts of the winding bundles of the excitation coil (see all Figures and the English abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ricoh combined with Ito to use any suitable magnetic cores with the induction coils to better shape the magnetic flux for better heating efficiency and result, in view of the teaching of Matsushita or Canon. The exact core arrangement would have been a matter of engineering expediencies depending on the overall structure of the heating roller and the induction coil.

6. Applicant's arguments with respect to claims 16-28 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 3742

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip H. Leung whose telephone number is (571) 272-4782.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571)-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Philip H Leung/

Primary Examiner, Art Unit 3742

P.Leung/pl

4-25-2008